

## The physiological effects of a week-long specialist tactical police selection course

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## THE PHYSIOLOGICAL EFFECTS OF A WEEK-LONG SPECIALIST TACTICAL POLICE SELECTION COURSE

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**Aim:** To determine the physiological effects of a week long, intensive, specialist police selection course.

**Design:** A retrospective cohort study.

**Method:** Data pertaining to 18 candidates was obtained during a five-day selection course for specialist police selection. Data included weight, grip strength, sit and reach flexibility, vertical jump height and vertical jump power output.

**Results:** Eleven candidates finished the selection course with significant ( $p=0.006$ ) decreases in body weight of 2.05kg [95% CI=3.65-0.45], significant ( $p<0.001$ ) decreases in grip strength of 14.48kg [95% CI=21.32-7.64] on the right and 14.27kg [95% CI=21.89-6.66] on the left and a significant ( $p<0.001$ ) decrease of sit and reach flexibility of 6.64cm [95%CI=9.94-3.33] was found. Non-significant decreases in power output and peak jump velocity of 669.77W [95%CI = 1942.92 to 603.39] and 0.28m/s [95%CI=0.69-0.14], were also found with an overall increase in vertical jump height 6.09cm [95%CI = -6.08 to 18.79].

**Conclusion:** Decreases in body weight, grip strength, lower limb flexibility and lower limb power output are evident in a grueling five-day specialist selection course.

### Key Practice Points:

- This study highlights a potential increased risk of injury through a five-day selection course.
- Health professionals working with police who are planning on attending selection courses should plan for these decreases and build redundancy to minimize their effect in an attempt to decrease injury and maximise chances of success.

**Proposed impact, if any, on the health outcomes of Aboriginal and Torres Strait Islander people:** This research will improve the health outcomes of Aboriginal and Torres Strait Islander people who serve in elite police forces.